

TRANSACTION OF THE OFFICIAL ACTION



Date of the Action
17 November 2004

Patent Application No: 09/937304

Applicant: SensIT AS

Term for reply: 20 January 2005

The basis for the Official Action is the description and the claims received at the Patent Office 2 May 2000 together with the letter with the same date and the figures received at the Patent Office 26 March 1999.

The Examination of the application is transferred to a new Examiner.

We consider that the application presumably will lead to a patent.

We have found additional publications:

D5) DE 19723127

D6) US 5438322

Publication D5 describes a device for measuring temperature inside a cooking vessel (5). A temperature sensitive element is used, which is in the form of a surface wave sensor (6), that is, SAW chip, with a temperature dependent transfer function (column 3, lines 49-59). The transducer (10) in the SAW chip is connected to an antenna (9) according to figure 3 via a conductor (12) that is, a transmission line. The antenna is mounted on the outside of the cooking vessel. The temperature sensitive element is placed inside an encapsulation according to column 3, lines 62-64. The encapsulation is mounted in a mounting hole according to figure 3. A second central antenna 4" sends and receives signals to/from the sensor via antenna 9. The second antenna is connected to a control unit (16) via a signal cable according to figure 5. The control unit is adapted to send a polling signal to and to receive a modified polling signal from the sensor according to column 4, lines 4-14 via the signal cable and the antennae. The control unit is further adapted for processing the modified polling signal and based on the properties of the modified polling signal, generating a data signal which is representative for the sensor's temperature according to column 4, lines 24-30. The SAW chip comprises reflectors and the temperature is determined based on phase lag between signal patterns.

Publication D6 describes a device where a temperature sensor (32) is placed inside a bolt (10) that thus constitutes an encapsulation for the sensor. An antenna (56) is mounted on the outside of the bolt.

The device described in the independent claim 1 does not have novelty in view of the prior art given by publication D5. We cannot see that the functional description in the claim stating that the temperature is to be measured in little accessible or movable mechanical part limits the claim's scope of protection. The mechanical part is not part of the sensor device itself. Thus the invention according to the independent claim 1 cannot be patented.

The independent claim 1 has novelty in view of publication D6.

The system described in claim 8 does not have novelty in view of publication D5. Use of more than one sensor and the consequent use of multiplexer is one of two alternatives in this claim. The other alternative solution included in the claim is use of a single sensor ("at least one sensor") without use of a multiplexer. The latter alternative solution is anticipated by the publication. Besides we cannot either see that the functional description in the claim regarding temperature being measured in parts with difficult access or/in a movable mechanical part limits the scope of protection of the claim. Thus the invention according to the independent claim 8 cannot be patented.

The independent claim 8 has novelty in view of publication D6.

The dependent claims 2-7 combined with the independent claim 1 have novelty in view of both prior art publications D5 and D6.

The dependent claim 9 combined with the independent claim 8 does not have novelty in view of the prior art given by publication D5.

The dependent claims 10-14 in combination with the independent claim 8 are new in view of publication D5.

As we consider that the independent claims 1 and 8 do not have novelty in view of publication D5, we do not consider that these claims have inventive step in view of publication D5.

We consider that dependent claims 2, 3 and 4 combined with the independent claim 1 do not differ substantially from the prior art illustrated by the new cited publications D5 and D6.

We consider that the independent claims 10-14 combined with the independent claim 8 does not differ substantially from the prior art given by publication D5.

We believe that the reference numbers to the drawings are not used with consistency in relation to the description and the figures. The figure reference number 14 refers, according to the description's page 5, line 27 to a sensor element and not an encapsulation as indicated in claims 1, 2, 5 and 8. The figure reference number 15 refers according to the description's page 5, line 27 a bolt and not an encapsulation as indicated in claims 1, 2 and 8. Claim 5 apparently refers to the embodiment according to figure 5 since a bolt with reference number 15b is used. In figure 5 the spring has reference number 19b while in figure 4 it has reference number 4. On the contrary, reference number 19 does not refer to a spring but to a material which holds components in place preferably an epoxy or heat resistant rubber sleeve. The detail with figure reference number 19a refers the sealing material of epoxy and not a spring. The reference numbers in the claims 5-7 must be corrected.

In a response we request that a set of claims is filed with independent claims having novelty and at the same time inventive step.

ON 23 January 2003 you an English set of claims at the Patent Office, which you maintain is filed at the EPO. A possibly acceptable set of claims can result from filing a translated and revised version of this set of claims. A possibly acceptable independent claim 1 can result from claim 1 in this set of claims. It must be clear in this set of claims that the bolt is part of the device and the claim must be drafted more clearly as a device claim by describing the invention by its

constructive details and not by actions as in a method claim. A possibly acceptable claim 8 can also result from claim 8 in this set of claims. It must be clear which constructive parts the system is composed of and the claim must be drafted more clearly as a device claim. This claim must also comprise more of the information in claim 1. The figure references must be corrected in a possible revised version of the English set of claims.